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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,844	06/10/2005	Karim Zaghib	032256-019	8954
21839 7590 08/08/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER HU, HENRY S	
			ART UNIT 1713	PAPER NUMBER
			MAIL DATE 08/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/501,844	<b>Applicant(s)</b> ZAGHIB ET AL.	
	<b>Examiner</b> Henry S. Hu	<b>Art Unit</b> 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on Pre-Amendment of June 10, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-35 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received:
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6-10-2005</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. This Office Action is in response to **Pre-Amendment** and **IDS** (1 page) filed on July 16, 2004 and June 10, 2005 respectively. With the Applicants' pre-amendment, **Claims 5-6, 8-17, 19-25 and 27-28 were amended** to only remove the improper multiple claim dependency, **while new dependent Claims 30-35 were added.** **Claims 1-35 with a total of two independent claims** (Claim 1 and Claim 28) are now pending. An action follows.

### **DETAILED ACTION**

#### ***Election/Restrictions***

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1, this is based on the preliminary search done by the examiner as well as by examining the references cited in international search report and IDS filed by Applicants. It is noted that all six independent claims are marked with an underline and are combined with its dependent claims.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted as following:

I. **Claims 1-5**, drawn to **polymer electrolyte** to be used for an electrochemical generator, wherein polymer electrolyte contains **two components** including: (A) at least one

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**four-branched polymer** as specified, and (B) at least one component selected from nine specified polymers or compounds.

II. **Claims 6-15**, drawn to **a crosslinkable electrolytic "composition"** comprising polymer electrolyte of Group I.

III. **Claims 16-27 and 32-35**, drawn to **electrochemical device** such as battery, super condenser or hybrid super condenser. The device comprises **three** components including: (A) **a polymer electrolyte of Group I**, (B) **an electroactive anode** such as the type  $\text{Li}_4\text{Ti}_5\text{O}_{12}$ , and (C) **a cathode of the 3.5 to 5 volt type** such as those prepared from  $\text{LiCoPO}_4$  and/or  $\text{Li}(\text{Mn}_{0.66}\text{Ni}_{0.34})\text{O}_2$  or the like.

IV. **Claims 28-29**, drawn to **different electrochemical device** that is stable during cycling as determined according to the method defined in the description on page 17 and that is higher than 4 volts.

V. **Claims 30-31**, drawn to **different electrochemical device** such as battery, super condenser or hybrid super condenser. The device comprises **three** components including: (A) **a crosslinkable polymer electrolyte composition of Group II**, (B) **an electroactive anode** such as the type  $\text{Li}_4\text{Ti}_5\text{O}_{12}$ , and (C) **a cathode of the 3.5 to 5 volt type** such as those prepared from  $\text{LiCoPO}_4$  and/or  $\text{Li}(\text{Mn}_{0.66}\text{Ni}_{0.34})\text{O}_2$  or the like.

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3. Where the group of inventions is claimed in one and the same international application, the requirement for unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression “**special technical features**” shall mean those technical features that define a contribution which each of the claimed inventions considered as a whole, **makes over the prior art**. The inventions listed as Groups I, II, III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, although they share the special technical feature, this special technical feature does not define a contribution over the prior art for the following reasons:

4. In view of international search report for **PCT/CA03/00052** in IDS filed on June 10, 2005 along with Examiner’s prior art search, **Claims 1-35** is either obvious or anticipated by following: **US 6,190,804 B1 to Ishiko et al. (cited as “X” reference), US 6,399,254 B1 to Kono et al., and EP 923,147 A2 to Ishiko et al.**, each individually or in combination. In summary, these four groups have no common features in the preparation as well as its application since they are structurally different. The scope of the claims, i.e., the metes and boundaries are distinct. Accordingly, the special technical feature linking the inventions, making polymer electrolyte, its composition and application from Group I, Group II, Group III, Group IV or Group V does not provide a contribution over the prior art, and no single general inventive concept exists. Therefore the restriction is appropriate.

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5. With respect to the fact that “all four groups are **structurally different** each other”, Group I was drawn to **a polymer electrolyte material**; Group II was drawn to **a crosslinkable electrolytic “composition”**, while each of Group III, Group IV and Group V was drawn to a **different electrochemical device**. It is found that even the same polymer electrolyte from Group I is indeed containing in each of Group II, Group III, Group IV and Group V as a major component; each group still has different scope, process of making and process of using.

To be more specific, the crosslinking function in the composition of Group II will certainly make Group II quite distinct from Group I. Based on the same rationale, the crosslinking function in Group V will also make Group V quite distinct from Group III or Group IV. The scope of Group III is at least somewhat different from that of Group IV.

6. Because these inventions are distinct for the reasons given above shown as different subject matters and the search required for each group is not required for other groups have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. It is noted that no phone call was made to **William C. Rowland (registration # 30,888, tel: 703 836-6620)** by the examiner due to the complexity on multiple (**five**) distinct groups. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Dr. Henry S. Hu** whose telephone number is **(571) 272-1103**. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The fax number for the organization where this application or proceeding is assigned is **(571) 273-8300** for all regular communications.

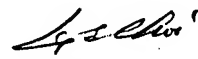
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Henry S. Hu

Patent Examiner, Art Unit 1713, USPTO

August 3, 2007

  
VG-SUI CHOI  
PRIMARY EXAMINER